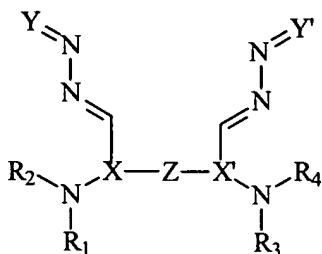


# CLAIMS

What is claimed is:

1. An organophotoreceptor comprising:
  - (a) a charge transport material having the formula



- where R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, and R<sub>4</sub> comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;  
X and X' comprise, each independently, an aromatic group;  
Y and Y' comprise, each independently, a (disubstituted)methylene group; and  
Z is a linking group;
- (b) a charge generating compound; and
  - (c) an electrically conductive substrate on which said charge transport material and said charge generating compound are located.

2. The organophotoreceptor of claim 1 further comprising a second charge transport material.

3. The organophotoreceptor of claim 2 wherein the second charge transport material comprises a charge transport compound.

4. The organophotoreceptor of claim 1 wherein X and X' are, each independently, a C<sub>6</sub>H<sub>3</sub> group.

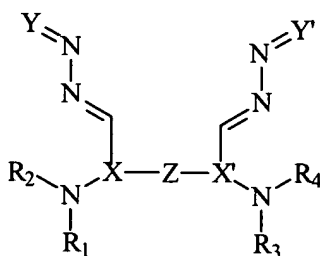
5. The organophotoreceptor of claim 1 wherein the (disubstituted)methylene group is selected from the group consisting of a 10H-anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

6. The organophotoreceptor of claim 1 wherein the (disubstituted)methylene group is a (di-aromatic)methylene group.

7. The organophotoreceptor of claim 1 comprising:  
 (a) a charge transport layer comprising said charge transport material and a polymeric binder; and  
 (b) a charge generating layer comprising said charge generating compound and a polymeric binder.

8. The organophotoreceptor of claim 1 wherein Z has the formula  $-(CH_2)_m-$  where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an  $NR_6$  group, a  $CR_7$ , or a  $CR_8R_9$  group where  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

9. An electrophotographic imaging apparatus comprising:  
 (a) a light imaging component; and  
 (b) an organophotoreceptor oriented to receive light from said light imaging component, said organophotoreceptor comprising:  
 (i) a charge transport material having the formula



where  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_4$  comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;  
 X and X' comprise, each independently, an aromatic group;

Y and Y' comprise, each independently, a (disubstituted)methylene group; and  
Z is a linking group;  
(ii) a charge generating compound; and  
(iii) an electrically conductive substrate on which said charge transport material and said charge generating compound are located.

10. The electrophotographic imaging apparatus of claim 9 further comprising a toner dispenser.

11. The electrophotographic imaging apparatus of claim 9 wherein the organophotoreceptor further comprises a second charge transport material.

12. The electrophotographic imaging apparatus of claim 11 wherein said second charge transport material comprises a charge transport compound.

13. The electrophotographic imaging apparatus of claim 9 wherein the (disubstituted)methylene group is selected from the group consisting of a 10H-anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

14. The electrophotographic imaging apparatus of claim 9 wherein the (disubstituted)methylene group is a (di-aromatic)methylene group.

15. The electrophotographic imaging apparatus of claim 9 wherein said organophotoreceptor comprises a belt or a drum that supports the electrically conductive substrate.

16. The electrophotographic imaging apparatus of claim 9 wherein X and X' are, each independently, a C<sub>6</sub>H<sub>3</sub> group.

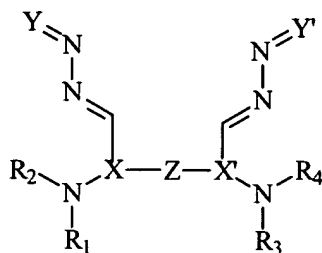
17. The electrophotographic imaging apparatus of claim 9 wherein Z has the formula -(CH<sub>2</sub>)<sub>m</sub>- where m is an integer between 1 and 20, inclusive, and one or

more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an NR<sub>6</sub> group, a CR<sub>7</sub>, or a CR<sub>8</sub>R<sub>9</sub> group where R<sub>6</sub>, R<sub>7</sub>, R<sub>8</sub>, and R<sub>9</sub> are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

18. An electrophotographic imaging process comprising:

(a) applying an electrical charge to a surface of an organophotoreceptor comprising:

(i) a charge transport material having the formula



where R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, and R<sub>4</sub> comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;

X and X' comprise, each independently, an aromatic group;

Y and Y' comprise, each independently, a (disubstituted)methylene group; and

Z is a linking group;

(ii) a charge generating compound; and

(iii) an electrically conductive substrate over which said charge transport material and said charge generating compound are located;

(b) imagewise exposing said surface of said organophotoreceptor to radiation to dissipate charge in selected areas and thereby form a pattern of charged and uncharged areas on said surface;

(c) contacting said surface with a toner to create a toned image; and

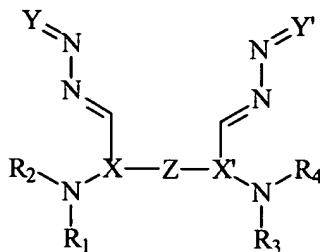
(d) transferring said toned image to a substrate.

19. The electrophotographic imaging process of claim 18 wherein said organophotoreceptor further comprises a second charge transport material.

20. The electrophotographic imaging process of claim 18 wherein Z has the formula  $-(CH_2)_m-$  where m is an integer between 1 and 20, inclusive, and one or more of the methylene groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an aromatic group, urethane, urea, an ester group, an  $NR_6$  group, a  $CR_7$ , or a  $CR_8R_9$  group where  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are, independently, a bond, H, hydroxyl, thiol, carboxyl, an amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group, or part of a ring group.

21. The electrophotographic imaging process of claim 18 wherein said toner comprises colorant particles.

22. A charge transport material having the formula



where  $R_1$ ,  $R_2$ ,  $R_3$ , and  $R_4$  comprise, each independently, an alkyl group, an alkenyl group, an aromatic group, a heterocyclic group, or a part of a ring group;  
X and  $X'$  comprise, each independently, an aromatic group;  
Y and  $Y'$  comprise, each independently, a (disubstituted)methylene group; and  
Z is a linking group.

23. The charge transport material of claim 22 wherein X and  $X'$  are, each independently, a  $C_6H_3$  group.

1           24. The charge transport material of claim 22 wherein the  
2           (disubstituted)methylene group is selected from the group consisting of a 10H-  
3           anthracen-9-ylidene group, a 9-fluorenylidene group, and a diarylmethylene group.

1           25. The charge transport material of claim 22 wherein Z has the formula  $-(CH_2)_m-$   
2           where m is an integer between 1 and 20, inclusive, and one or more of the methylene  
3           groups is optionally replaced by O, S, N, C, B, P, C=O, O=S=O, a heterocyclic group, an  
4           aromatic group, urethane, urea, an ester group, an  $NR_6$  group, a  $CR_7$ , or a  $CR_8R_9$  group  
5           where  $R_6$ ,  $R_7$ ,  $R_8$ , and  $R_9$  are, independently, a bond, H, hydroxyl, thiol, carboxyl, an  
6           amino group, an alkyl group, an alkenyl group, a heterocyclic group, an aromatic group,  
7           or part of a ring group.